




# **uFR Online NFC Reader - Android 1.0 version**

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## Application preview

 **WiFi NFC Reader -  $\mu$ FR Online**

☒ HTTP ☐ TCP/IP ☐ UDP ☐ Bluetooth Ver 1.0

IP address / Serial number :

SCAN

Manual input:

Port :

IP or MAC address

80

CONNECT

Beep signal:

Light signal:

Short

Long green

UI SIGNAL

Card UID :

GET UID

Command :

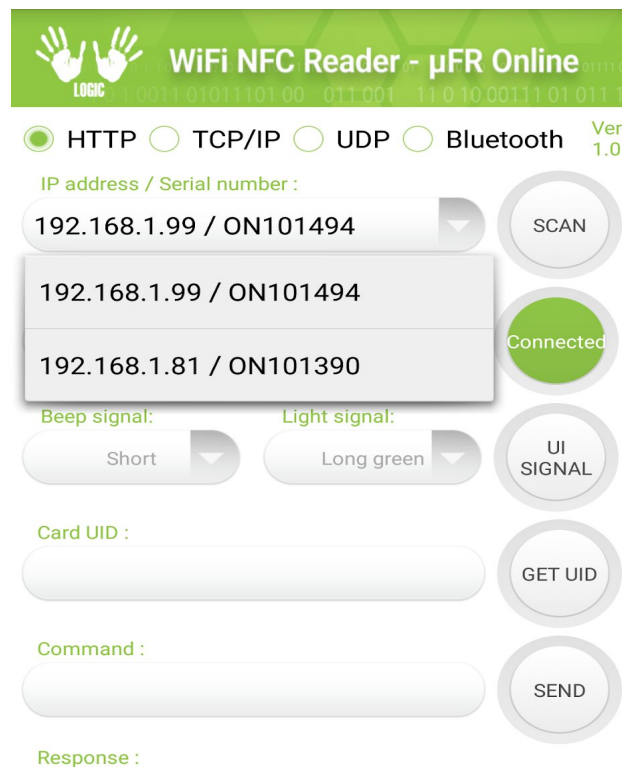
SEND

Response :

## Options

Click on 'SCAN' button to see available uFR Online readers. Notice that you have to be connected at the same network as readers. If you can't find reader ip address by clicking 'SCAN' button, you have an option to manually input ip address. If ip address is manually entered, application will take that ip for work, if field for manual ip address input is empty, application will use ip address from dropdown list. When you select reader's ip address from drop down list and click button 'GET UID' you will be able to see card's uid in text field.

On button 'UI SIGNAL' you will be able to hear sound from buzzer and alternation light signal.

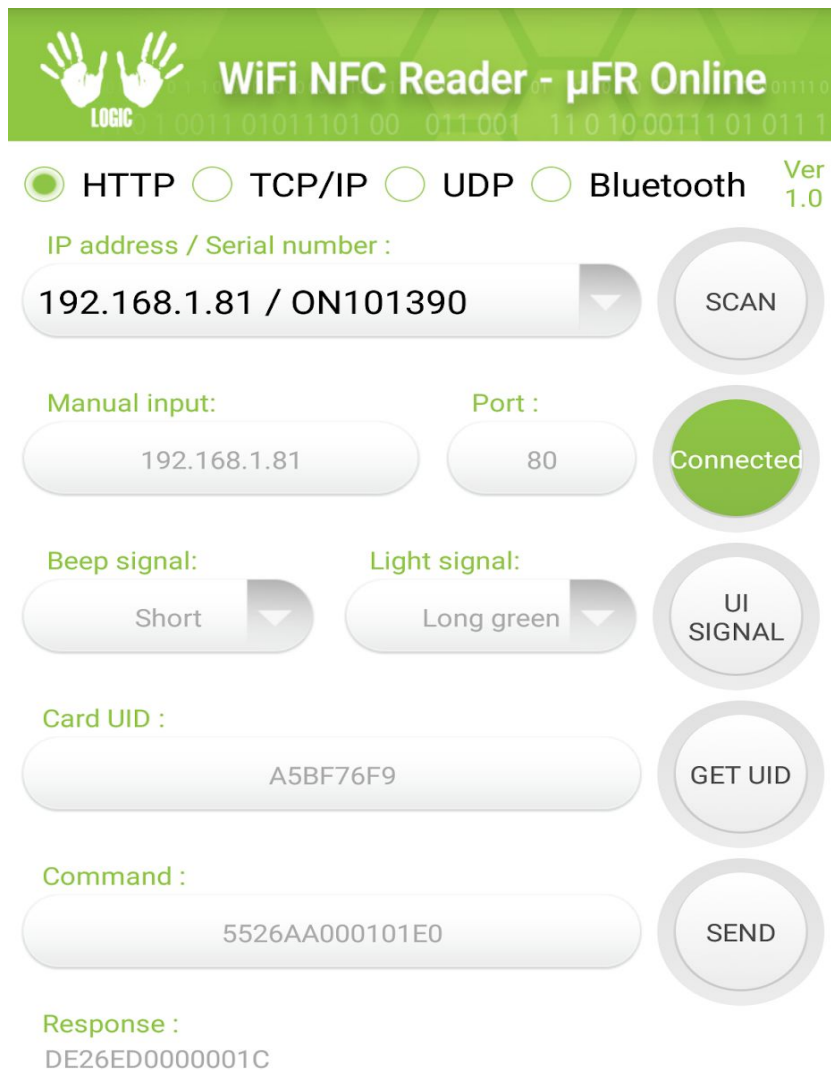


The screenshot shows the 'WiFi NFC Reader - uFR Online' application interface. At the top, there is a green header with the Digital Logic logo and the text 'WiFi NFC Reader - uFR Online'. Below the header, there are four radio buttons for communication protocols: HTTP (selected), TCP/IP, UDP, and Bluetooth. To the right of these buttons is a version indicator 'Ver 1.0'. Below the protocol selection, there is a label 'IP address / Serial number :'. A dropdown menu is open, showing three options: '192.168.1.99 / ON101494', '192.168.1.99 / ON101494', and '192.168.1.81 / ON101390'. To the right of the dropdown menu is a 'SCAN' button. Below the dropdown menu, there are two labels: 'Beep signal:' and 'Light signal:'. Below 'Beep signal:' is a dropdown menu with 'Short' selected. Below 'Light signal:' is a dropdown menu with 'Long green' selected. To the right of these dropdown menus is a 'UI SIGNAL' button. Below the 'UI SIGNAL' button is a 'GET UID' button. Below the 'GET UID' button is a 'SEND' button. Below the 'SEND' button is a label 'Card UID :'. Below the 'Card UID :' label is a text input field. Below the text input field is a label 'Command :'. Below the 'Command :' label is a text input field. Below the text input field is a label 'Response :'. Below the 'Response :' label is a text input field.

The same thing will happen if you choose UDP or TCP/IP communication protocol. If HTTP protocol is selected, then port is always 80 by default.


If UDP or TCP/IP protocol is selected, you can modify the port by yourself. Note that if you work with HTTP, TCP/IP or UDP connection, button "CONNECT" will turn to "Connected" and it will become green.

You can also type hexadecimal command from uFR COM protocol to send it to reader. Simply type the command and click 'SEND' button. The picture below shows USER\_INTERFACE\_SIGNAL command sent to reader:



The screenshot shows the 'WiFi NFC Reader - uFR Online' web interface. At the top, there's a header with the Digital Logic logo and the title. Below the header, there are radio buttons for selecting a protocol: HTTP (selected), TCP/IP, UDP, and Bluetooth. To the right of these buttons is the version 'Ver 1.0'. Below the protocol selection, there's a field for 'IP address / Serial number' containing '192.168.1.81 / ON101390' and a 'SCAN' button. Further down, there are fields for 'Manual input' (containing '192.168.1.81') and 'Port' (containing '80'), followed by a green 'Connected' button. Below these are dropdown menus for 'Beep signal' (set to 'Short') and 'Light signal' (set to 'Long green'), followed by a 'UI SIGNAL' button. There's a 'Card UID' field containing 'A5BF76F9' and a 'GET UID' button. At the bottom, there's a 'Command' field containing the hexadecimal string '5526AA000101E0' and a 'SEND' button. Finally, there's a 'Response' field showing 'DE26ED0000001C'.

You can also send command with delimiters and if you want automatic checksum calculation you can type 'XX' as the last byte in your command.



## WiFi NFC Reader - $\mu$ FR Online

☒ HTTP
 ☐ TCP/IP
 ☐ UDP
 ☐ Bluetooth
 Ver 1.0

IP address / Serial number :  
 192.168.1.81 / ON101390

SCAN

Manual input: 192.168.1.81
 Port : 80

Connected

Beep signal: Short
 Light signal: Long green

UI SIGNAL

Card UID :  
 A5BF76F9

GET UID

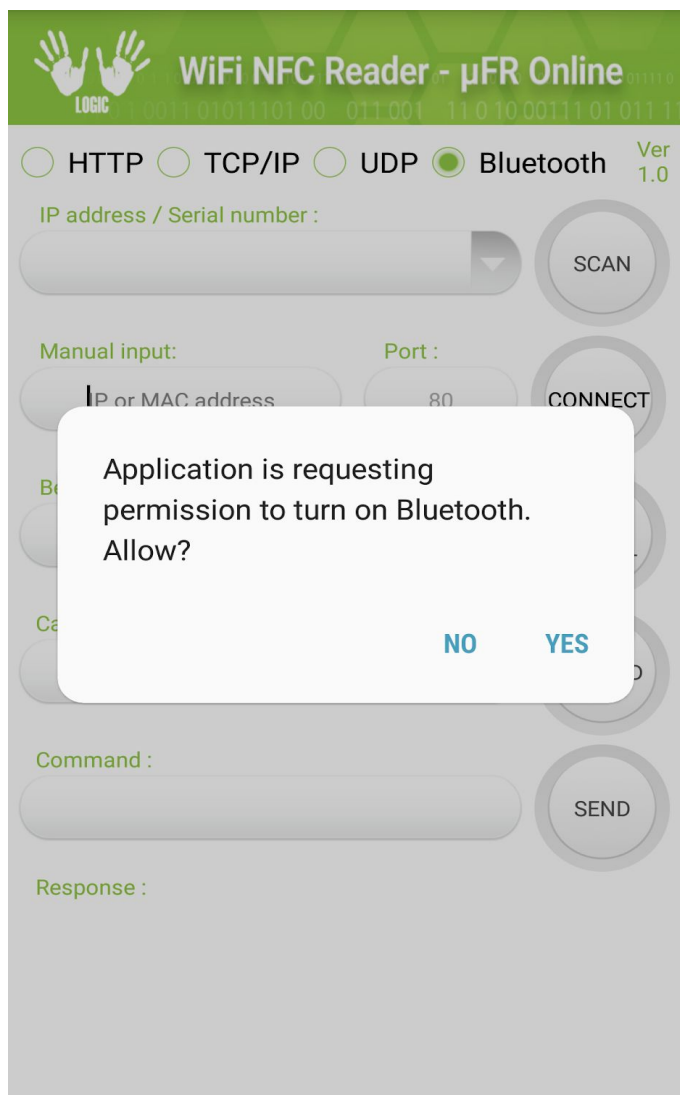
Command :  
 5526AA000101XX

SEND

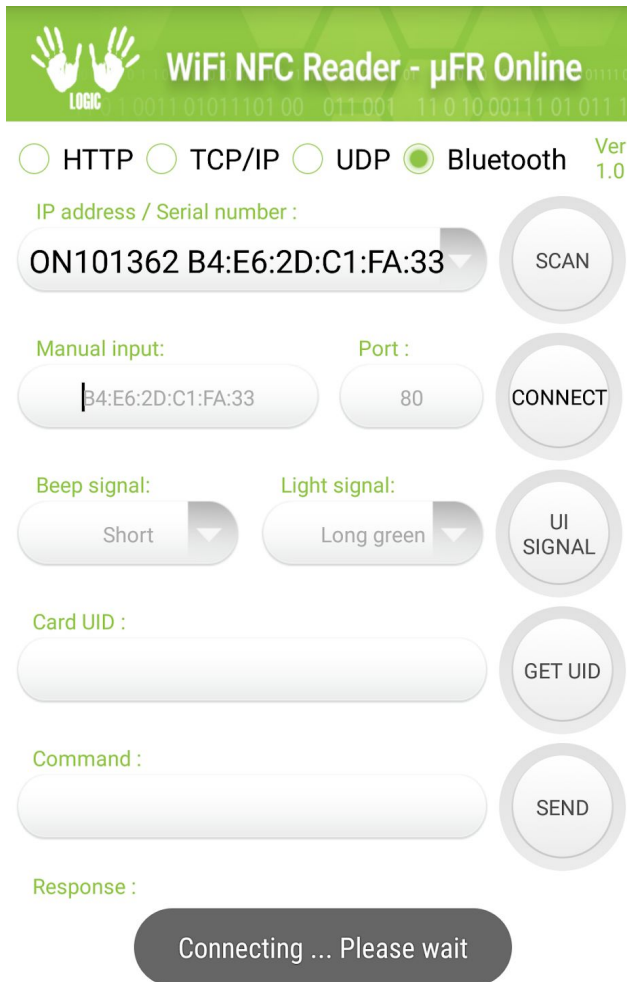
Response :  
 DE26ED0000001C

## Bluetooth

If you click on Bluetooth radio button application will ask for permission to turn Bluetooth ON, if it isn't already turned ON. After turning Bluetooth ON, you will be able to click "SCAN" button to see available uFR Online readers working in Bluetooth mode. Choose device you want to work with and click "CONNECT" button.




The screenshot shows the app interface with the Bluetooth radio button selected. A system dialog box is displayed in the foreground, asking for permission to turn on Bluetooth. The dialog text reads: "Application is requesting permission to turn on Bluetooth. Allow?" with "NO" and "YES" buttons.



The screenshot shows the app interface after the Bluetooth permission is granted. The "SCAN" button has been clicked, and the "IP address / Serial number" field now displays "ON101362 B4:E6:2D:C1:FA:33". The "CONNECT" button is visible. Below the "CONNECT" button, there are fields for "Manual input" (containing "B4:E6:2D:C1:FA:33") and "Port" (set to "80"). There are also buttons for "Beep signal" (Short) and "Light signal" (Long green). At the bottom, there is a "Command" field and a "SEND" button. A "Response" field is at the very bottom, and a dark grey button with the text "Connecting ... Please wait" is overlaid on it.

When you click "CONNECT" button, wait until device is connected, and then you will be able to work with uFR Online reader. If device is successfully connected, you will see alert and "CONNECT" button will become green.



**WiFi NFC Reader - μFR Online**

☐ HTTP ☐ TCP/IP ☐ UDP ☒ Bluetooth Ver 1.0

IP address / Serial number :

ON101362 B4:E6:2D:C1:FA:33

SCAN

Manual input: Port :

B4:E6:2D:C1:FA:33 80

Connected

Beep signal: Light signal:

Short Long green

UI SIGNAL

Card UID :


GET UID

Command :

SEND

Response :

Connected to uFR Online : ON101362



**WiFi NFC Reader - μFR Online**

☐ HTTP ☐ TCP/IP ☐ UDP ☒ Bluetooth Ver 1.0

IP address / Serial number :

ON101362 B4:E6:2D:C1:FA:33

SCAN

Manual input: Port :

B4:E6:2D:C1:FA:33 80

Connected

Beep signal: Light signal:

Short Long green

UI SIGNAL

Card UID :

A5BF76F9

GET UID

Command :

SEND

Response :



## Revision history

Date	Version	Comment
2019-05-13	1.0	Base document